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JC584 U.S. PTO  
09/444660

Edward J. Petrus, M.D.  
3413 Spanish Oak Drive  
Austin, Texas 78731  
Tel: 512-454-6500  
Fax: 512-453-0066  
E-mail: ejpetrus@pol.net

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09/444660  
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November 19, 1999

Assistant Commissioner for Patents  
Patent and Trademark Office  
Washington, D.C. 20231

Re PETRUS/"Dietary supplement selector and method."

Dear Sir:

Enclosed are the following items:

Patent application, "Dietary Supplement Selector and Method."

Declaration for Utility or Design Patent Application.

Small entity declaration.

Information disclosure statement and copies of cited patents and literature documents.

Check for \$380.00

Thank you for your assistance.

Sincerely,

  
Edward J. Petrus, M.D.

In the United States Patent and Trademark Office

First/Sole Applicant: Edward J. Petrus

Joint/Second Applicant:

Title: " Dietary Supplement Selector And Method "

**Small Entity Declaration—Independent Inventor(s)**

As a below-named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under Section 41(a) and (b) of Title 35 United States Code, to the Patent and Trademark Office with regard to my above-identified invention described in the specification filed herewith. I have not assigned, granted, conveyed, or licensed—and am under no obligation under any contract or law to assign, grant, convey, or license—any rights in the invention to either (a) any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or (b) any concern which would not qualify as either (i) a small business concern under 37 CFR 1.9(d) or (ii) a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization to which I have assigned, granted, conveyed, or licensed—or am under an obligation under contract or law to assign, grant, convey, or license—any rights in the invention is listed below:

- There is no such person, concern, or organization.  
 Any applicable person, concern, or organization is listed below.\*

Full Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

I acknowledge a duty to file, in the above application for patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Signature of Sole/First Inventor

Signature of Joint/Second Inventor

Print Name of Sole/First Inventor

Edward J. Petrus

Print Name of Joint/Second Inventor

Date of Signature

11/19/99

Date of Signature

\*Note: A separate Small Entity Statement is required from any listed entity.

## **DIETARY SUPPLEMENT SELECTOR AND METHOD**

### **Field of the Invention**

A method and process for the selection of dietary supplements.

### **Background of the Invention**

5 We are all biochemically different, and our dietary nutrient requirements for optimal health vary. Each of us is unique due to variations in our genetics, lifestyle, dietary habits and health problems. If we were all the same, the same multivitamin-supplement with the same doses would provide the same results. Dr. Roger J. Williams, a pioneer in the field of nutrition and renowned biochemist, who discovered pantothenic acid (vitamin B<sub>5</sub>), wrote extensively on "biochemical individuality" and has shown that every human is innately highly distinctive in terms of his biochemistry. Dr. Williams believed that no two individuals are identical in bodily structure and neither are their chemical processes always carried out in the same ways. Different persons need different combinations and amounts of food elements, vitamins and other nutrients.

10 Some 106 million Americans use vitamin and mineral supplements every day, and 45 million reported using herbal remedies regularly. Further, 74 million Americans are more likely to treat themselves than see or consult a physician. A recent survey noted that consumers have low confidence in labeling information and product safety, and that product labels, magazines, doctors, books and advertising all ranked ahead of pharmacists in providing information on dietary supplements. Lower than pharmacists as an information source, the survey noted, are health food stores and alternative medicine practitioners. One of the last places consumers used for information 15 on dietary supplements was the Internet. Conlan MF, *Drug Topics*, October 18, 1999, pg. 58.

20 A more reliable source of information regarding the selection of dietary supplements is sought

by consumers and provided by the present invention.

## **Summary of the Invention**

This invention relates to a method and process for inputting an individual's medical information and obtaining a dietary supplement profile unique for that individual.

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## **Brief Description of the Drawings**

Fig. 1 is a diagram of the process for determining the dietary supplement profile for an individual.

Fig. 2 is a sample dietary supplement profile.

## **Detailed Description of the Invention**

10 With reference to Fig 1, the principal components used to implement the present invention are illustrated in a block diagram. At the top of the diagram the consumer completes a health history questionnaire 1. The questionnaire can be in paper form to be entered into the computer database, or an interactive computer format that inquires about the family history, personal health history, environmental history, diet and meal pattern, food supplements, and symptom history. This information is entered and stored in the computer database 2, where it is compared to a health profile 15 for a person of the consumer's age and health history background. Based on this comparison, a dietary supplement profile 3 can be generated that calculates the consumers personal nutritional needs of vitamins, minerals, amino acids, enzymes, herbs and other nutritional supplements to achieve optimal health and wellness. Optimal health is not the absence of disease but a positive state of 20 mental and physical well-being. The dietary supplement profile 3 can be further defined into commercially available products 4, for both the convenience of the consumer or for the benefit of the commercial provider.

The health history questionnaire 1, may include a family history of parents, grandparents, siblings and children identifying the most consistent illness or health problems, if known, such as alcoholism, Alzheimer's disease, arthritis, diabetes, cancer, high blood pressure, liver disease, kidney disease, heart disease, gout, mental illness, obesity, congenital defects and any disease known to have a strong tendency to be inherited. Personal health history may inquire about childhood illnesses, serious accidents, illnesses, abnormal blood test results, surgeries, weight history, prescription and nonprescription medications, use of tobacco products, alcohol and illicit drugs, current major health problems, change in life situations, employment, work environment, allergies, and stress. A diet and meal pattern history and supplements currently used. A symptom history explores many health problems from insomnia, appetite, foods, bowel habits, skin problems, nail and hair problems, emotional complaints, fatigue, menstrual difficulties and stress.

The consumer's dietary supplement profile 3 can be further individualized by supplementing information provided by a physical exam 5 which allows the practitioner to input data such as blood pressure, pertinent physical and emotional findings, current medications, body fat analysis, and any contraindications to dietary supplements. Laboratory studies 6 can also be incorporated into the database 2 , that provides additional insight into the consumers health status. Laboratory studies that could be input into the database by example comprise: complete blood count and urinalysis, automated blood analyses, serum vitamin levels, hair analyses or essential metabolic analysis for nutritional assessment testing.

The computer analysis can evaluate and compare the individual's health information with standardized profiles based on age, sex, physical activity, dietary habits, past medical history and other items covered in the questionnaire. Some dietary supplement considerations by example include

the following: Persons with a high cholesterol or a family history of heart disease could increase vitamin E to 400 IU, vitamin C to 1 gm, beta-carotene to 25,000 IU, chromium to 200 mcg, magnesium to 400 mg; Persons over age 60 should increase zinc intake to 50 mg, calcium to 1.5 gm, vitamin E to 400 IU, beta-carotene to 25,000 IU, vitamin D to 800 IU, magnesium to 400 mg, 5 chromium to 200 mcg and delete iron; If a woman is on a contraceptive pill to increase vitamin B<sub>6</sub> to 50 mg; If the woman is menopausal or postmenopausal increase calcium to 1.5 gm, magnesium to 400 mg, vitamin E to 400 IU and delete iron; If a smoker or in an air-polluted area increase vitamin C to 1 gm, selenium to 400 mcg, beta-carotene to 25,000 IU, vitamin E to 400 IU, copper to 3 mg and zinc to 50 mg; If the subject exercises three times a week increase vitamin E to 400 IU, 10 magnesium to 400 mg, vitamin B<sub>1</sub> to 100 mg and zinc to 50 mg; If more than ten alcoholic beverages are consumed a week increase vitamin B<sub>1</sub> to 100 mg, folic acid to 800 mcg and vitamin C to 1 gm. If the subject is underweight or overweight a recommended weight management program can be provided with the profile.

The invention is further illustrated by the example shown in Fig 2, which is to be regarded as 15 illustrative only, and in no way limit the scope of the invention. In this example, a vitamin and mineral profile is presented for supplementation to the individual's current regimen. Amino acids, enzymes, herbs and other supplements can be incorporated into the profile. The profile can also show a comparison with past profiles to determine any changes in nutritional status. The profile can also be further defined in terms of commercial products available by companies who provide supplements for 20 the public.

Computerized programs for medical needs are not new to the art. Potter et al, U.S. Pat. No. 4,733,354 discloses an interactive method for performing a differential diagnosis using a programmed

computer system and a stored data base. Kaufman et al, U.S. Pat. No. 5,036,462 discloses a medication delivery device. Swenson et al, U.S. Pat. No. 5,632,925 discloses a virtual medical instrument system for storing diagnostic test protocols. Williams III, U.S. Pat. No. 5,704,350 discloses a method for selecting foodstuffs to compare the user's daily dietary and physical activities to the user's recommended dietary allowance. None of the above cited patents teach or suggest the use of the method or process outlined in the present invention.

5            Although illustrative embodiments of the invention have been shown and described, a wide range of modifications, change, and substitution is contemplated in the foregoing disclosure and in some instances, some features of the present invention may be employed without a corresponding use of the other features. Accordingly, it is appropriate that the appended claims be construed broadly and in a manner consistent with the scope of the invention.

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1      **What is claimed is:**

- 2      1.     A method for calculating the dietary supplement profile for an individual comprising:  
3                a) a health questionnaire completed by the individual,  
4                b) comparison of the questionnaire information to a standard health profile in a  
5                computer data base,  
6                c) the generation of a dietary supplement profile based on the individual's health  
7                information listing the vitamins, minerals, amino acids, enzymes, herbs and other  
8                nutritional supplements suggested for optimal health and wellness.
- 9      2.     The method for calculating the dietary supplement profile of claim 1, further  
10              comprises the addition of information provided by a physical examination.
- 11     3.     The method for calculating the dietary supplement profile of claim 1 further  
12              comprises the addition of information provided by laboratory studies.
- 13     4.     The method for calculating the dietary supplement profile of claim 1, further  
14              comprises a list of commercially available products that provide the dietary supplements listed  
15              in the profile.
- 16     5.     The method for calculating the dietary supplement profile of claim 1, further  
17              comprises a plan for weight management.
- 18     6.     A process for calculating the dietary supplement profile for an individual comprising  
19              the steps of:  
20                    a) completing a health questionnaire by the individual,  
21                    b) comparison of the questionnaire information to a standard health profile in a  
22                    computer data base,

1                   c) the generation of a dietary supplement profile based on the individual's health  
2                   information listing the vitamins, minerals, amino acids, enzymes, herbs and other  
3                   nutritional supplements suggested for optimal health and wellness.

4                 7. The process for calculating the dietary supplement profile of claim 6, further  
5                   comprises the addition of information provided by a physical examination.

6                 8. The process for calculating the dietary supplement profile of claim 6, further  
7                   comprises the addition of information provided by laboratory studies.

8                 9. The process for calculating the dietary supplement profile of claim 6, further  
9                   comprises a list of commercially available products that provide the dietary supplements listed  
10                  in the profile.

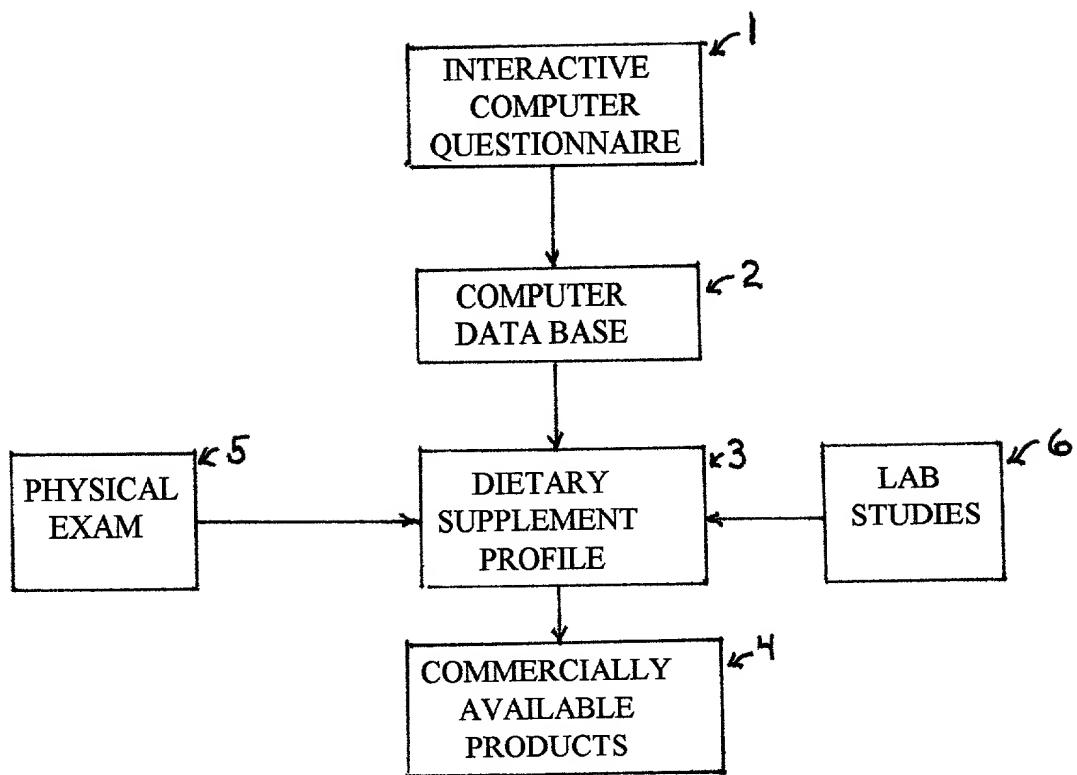
11                10. The process for calculating the dietary supplement profile of claim 6, further  
12                  comprises a plan for weight management.

13                  14                  15

## **Abstract**

This invention relates to a method and process for calculating a dietary supplement profile for an individual of vitamins, minerals, amino acids, enzymes, herbs and other nutritional supplements to obtain optimal health and wellness by completing a health questionnaire, and optionally adding information provided by physical examination and laboratory studies, and comparing the individual's health information to a standard health profile in a computer data base. The method and process further comprises a list of commercially available products that provide the items listed in the dietary supplement profile.

Health Nutriton Health Nutriton Health Nutriton Health Nutriton Health Nutriton



**FIG. 1**

## DIETARY SUPPLEMENT PROFILE

Name: John Consumer

Age: 60 DOB: 11/06/39 Sex: M

Weight: 200 lbs

Height: 5'11"

Date:

The following daily dietary supplements are recommended:

Vitamin A (retinyl acetate)	12,500 IU
Beta-Carotene	10,000 IU
Vitamin B <sub>1</sub> (thiamine)	30 mg.
Vitamin B <sub>2</sub> (riboflavin)	30 mg
Vitamin B <sub>3</sub> (niacinamide)	90 mg.
Vitamin B <sub>5</sub> (pantothenic acid)	20 mg.
Vitamin B <sub>6</sub> (pyridoxal-5-phosphate)	30 mg.
Vitamin B <sub>12</sub> (cyanocobalamine)	200 mcg.
Biotin (d-biotin)	300 mcg.
Choline (choline bitartrate)	20 mg.
Folic acid	800 mcg.
Vitamin C (ascorbic acid)	300 mg
Vitamin D (cholecalciferol)	100 IU
Vitamin E (d- $\alpha$ -tocopherol)	200 IU
Vitamin K (phytonadione)	60 mcg.
Boron (boron aspartate)	3 mg.
Calcium (calcium citrate)	400 mg.
Chromium (chromium aspartate)	20 mcg.
Copper (copper aspartate)	250 mcg.
Iodine (kelp)	150 mcg.
Iron	-0-
Magnesium (magnesium citrate)	300 mg.
Manganese (manganese citrate)	15 mg.
Molybdenum (molybdenum chelate)	45 mcg.
Potassium (potassium citrate)	90 mg.
Selenium (L-selenomethionine)	150 mcg.
Vanadium (vanadium chelate)	50 mcg.
Zinc (zinc citrate)	30 mg.

**FIG. 2**

## Declaration for Utility or Design Patent Application

As a below-named inventor, I hereby declare that my residence, post office address, and citizenship are as stated below next to my name and that I believe that I am the original, first, and sole inventor [if only one name is listed below] or an original, first, and joint inventor [if plural names are listed below] of the subject matter which is claimed and for which a patent is sought on the invention, the specification of which is attached hereto and which has the following title:

### DIGESTIVE SUPPLEMENT SELECTOR AND METHOD

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration. I acknowledge a duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, Section 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Please send correspondence and make telephone calls to the First Inventor below.

Signature: Sole/First Inventor: E. Petrus

Print Name: EDWARD J. PETRUS Date: 11/19/99

Legal Residence: \* 3413 SPANISH OAK DR. Citizen of: USA

Post Office Address: AUSTIN, TX 78731

Telephone: 512-454-6500

Signature: Joint/Second Inventor: \_\_\_\_\_

Print Name: \_\_\_\_\_ Date: \_\_\_\_\_

Legal Residence: \* \_\_\_\_\_ Citizen of: \_\_\_\_\_

Post Office Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

\* City and state, county and state or city, state and country, if foreign.